**PATENT** 

**Amendments to the Drawings** 

An Appendix including New Sheets 1-4 and Replacement Sheets 5-7 is attached. The new and replacement Drawings include FIGS. 1-8. The amendments to the Drawings add no

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new matter.

Attachment: New Sheets 1-4 and Replacement Sheets 5-7

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#### **REMARKS**

This paper is responsive to the Office Action dated February 15, 2006 (the "Office Action").

Claims 1, 2 and 4-21 are pending in the application.

Claims 1, 2 and 4-21 stand rejected.

No claims have been amended, canceled, or added in this paper.

The Office Action includes an objection to the Specification. Claims 1, 2, and 4-21 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement. Claims 1, 2, and 4-21 stand rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. The Office Action also presents a Requirement for Information under 37 C.F.R. § 1.105.

# Objection to the Specification

The Office Action includes an objection to the Specification. The Office Action objected to the use of an appendix and to the incorporation by reference. The Office Action required that an amendment be submitted to clarify the disclosure.

Applicant has amended the Specification accordingly. The amendments add no new matter. Support for the amendments may be found, for example, in FIGS. 1 and 2 and the accompanying text of the section titled "ID-07-00" among the appendices as originally filed, and in FIGS. 1-3 and the accompanying text of the section titled "Gating and Shortage Risk" among the appendices as originally filed. Additional support for the amendments may also be found in U.S. Provisional Patent Application No. 60/213,189 (for example, on pp. 2-5 of Appendix A therein, and on p. 2 of Appendix B therein). Applicant notes that Application No. 60/213,189 was incorporated by reference in the present application (on p. 9 of the specification as originally filed), and in the provisional application from which the present application claims the benefit of priority (on p. 1 of U.S. Provisional Patent Application No. 60/229,840).

In the accompanying Substitute Specification, the appendices as originally filed have been deleted and Applicant respectfully submits that the organization of the disclosure has been clarified appropriately. Accordingly, Applicant respectfully requests that the pending objection to the Specification be withdrawn.

# Rejections under § 112, first paragraph

Claims 1, 2, and 4-21 stand rejected under § 112, first paragraph, as failing to comply with the enablement requirement. The Office Action proposes that the material in the specification and the provisional application would not enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Specifically, the Office Action proposes that it is not clear how to compute a mean production value and/or a component gating risk, that the Applicant fails to define and/or explain the vector of connect rates for a component and how they affect the risk calculation, and that the mean production value is not clearly defined in such a way as to allow one of ordinary skill in the art to calculate the mean production.

Applicant respectfully submits that the issues posed by the Office Action are addressed in the present amendments to the Specification. For example, paras. 25, 26, 34, 46, 51, 54, and 56, among others, discuss and enable a person having ordinary skill in the art to use connect rates, component gating risk, and mean production values according to the disclosed implementations of the present invention. Accordingly, Applicant respectfully requests that the pending rejections under § 112, first paragraph be withdrawn.

### Rejections under § 101

Claims 1, 2, and 4-21 stand rejected under § 101 as being directed to non-statutory subject matter. In particular, the Office Action proposes that the claims fail to meet the standards for patentability articulated in *State Street Bank & Trust Co. v. Signature Financial Group Inc.*, 149 F. 3d 1368, 47 USPQ2d 1596 (Fed. Cir. 1998). As noted in the Office Action, the claimed invention as a whole must accomplish a practical application. That is, it must produce a "useful, concrete and tangible result." MPEP § 2106(II)(A) (citing *State Street*, 149 F.3d at 1373, 47 USPQ2d at 1601-02.)

The Office Action proposes, however, that the present invention is not tangible and not patentable. In particular, the Office Action states that Applicant's claims "are directed to computing a risk, which is not a real world result since coming up with a potential risk can be performed mentally."

Applicant respectfully submits that a claim is not rendered unpatentable under § 101 merely because the claim relates to techniques for calculating risk or other quantities. Indeed, the State Street court found that such calculations are patentable. The "transformation of data, representing discrete dollar amounts, by a machine through a series of mathematical calculations into a final share price, constitutes a practical application of a mathematical algorithm, formula, or calculation, because it produces 'a useful, concrete and tangible result' -- a final share price momentarily fixed for recording and reporting purposes and even accepted and relied upon by regulatory authorities and in subsequent trades." State Street, 149 F.3d at 1373, 47 USPQ2d at 1601 (as quoted in MPEP § 2106(II)(A)).

In the present application, claim 1 for example is directed to a computer-implemented method that includes "estimating of a component gating risk in a manufacturing process," which in turn includes "computing a mean production value using an altered component plan" and "computing said component gating risk using said mean production value." A person having ordinary skill in the art would readily recognize these operations and computations as producing a useful, concrete and tangible result. For example, as set forth in the specification at para. 23, "If component planners must negotiate component supply contracts (which specify the number of each component to ship in a planning period) before demand is realized, there is a residual risk that some components will be in short supply. Estimating this risk may help inform supply contract negotiation."

The Office Action also states that the present invention is not concrete "since crucial variables in the risk equations are not defined in such a way so that one would be able to determine the gating risk." Applicant understands this contention as elaborating on the enablement issues discussed above. Applicant respectfully submits that in view of the specification as amended and as discussed above, the application presents an enabling disclosure. Thus, in view of the amendments to the specification and in view of the above arguments regarding the requirements of *State Street*, Applicant respectfully requests that the pending rejections under § 101 be withdrawn.

## Requirement for Information

The Office Action presents a Requirement for Information under 37 C.F.R. § 1.105. Applicant has made reasonable inquiry to find the factual information requested in the Requirement for Information.

The Examiner requests a list of keywords that are particularly helpful in locating publications related to the disclosed art of calculating gating risk using mean production values and a vector of connect rates.

Applicant responds with the following keywords and phrases: gating, gating risk, supply chain, supply provisioning, build to order, build to stock, component management.

The Examiner requests the citation and a copy of each publication that any of the applicants authored or co-authored and which describe the disclosed subject matter of calculating gating risk for a component.

Applicant and Assignee respond with the citations of the following publications and with copies of these publications in the accompanying Information Disclosure Statement.

- "Success Story: Sun Microsystems" (brochure), 2 pages, December 2001.
- "Data Sheet: Revenue Director" (brochure), 2 pages, September 2005.
- "Rapt And Actuate Announce Strategic Partnership to Deliver Tailored Trading Intelligence Data" (press release), 1 page, 2005, downloaded August 15, 2006 from
  - http://www.actuate.com/corporate/news/pressrelease.asp?prnt=1&ArticleId=605
- "Rapt/Actuate Deliver Interactive and Actionable Content" (press release), 1
  page, downloaded August 15, 2006 from
  http://www.taborcommunications.com/dsstar/01/0116/102571.html

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In particular, the Examiner seeks the source of the gating risk equation and asks if the inventor developed the equation. The Examiner asks what materials were used to arrive at the gating risk equation, and whether the equation is from a printed publication. The Examiner requests pages of any relevant publication.

Applicant responds that the inventors did develop the gating risk equations (Eqs. 6-8 in the Supplemental Specification). Applicant responds that the inventors originated the gating risk equations (Eqs. 6-8 in the Supplemental Specification), and that the gating risk equations did not come from a printed publication. With respect to the request for pages of any relevant publication in this regard, Applicant responds that such publications are unknown to or are not readily available to the party or parties from which they were requested.

The Examiner requests the citation and a copy of each publication that is a source used for the description of the prior art in the disclosure. The Examiner also requests a concise explanation of that publication's contribution to the description of the prior art.

Applicant responds that such publications are unknown to or are not readily available to the party or parties from which they were requested.

The Examiner requests the citation and a copy of each publication that any of the applicants relied upon to develop the disclosed subject matter that describes the applicant's invention, particularly as to developing the equations used to determine gating risk. For each publication, the Examiner requests a concise explanation of the reliance placed on that publication in the development of the disclosed subject matter.

Applicant responds that such publications are unknown to or are not readily available to the party or parties from which they were requested. Applicant responds that the inventors originated the gating risk equations (Eqs. 6-8 in the Supplemental Specification) and the related techniques.

The Examiner requests the citation and a copy of each publication that any of the applicants relied upon to draft the claimed subject matter. For each publication, the Examiner

requests a concise explanation of the reliance placed on that publication in distinguishing the claimed subject matter from the prior art.

Applicant responds that such publications are unknown to or are not readily available to the party or parties from which they were requested. Applicant responds that the inventors originated the gating risk equations (Eqs. 6-8 in the Supplemental Specification) and the related techniques.

The Examiner requests the names of any products or services that have incorporated the claimed subject matter.

Applicant responds that the products and services that that have incorporated the claimed subject matter are "RAPT REVENUE DIRECTOR" and "RAPT BUY."

#### **Conclusion**

Applicant submits that all claims are now in condition for allowance, and an early notice to that effect is earnestly solicited. Nonetheless, should any issues remain that might be subject to resolution through a telephonic interview, the Examiner is requested to telephone the undersigned.

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P. O. Box 1450, Alexandria, Virginia, 22313-1450, on August 15, 2006.

Attorney for Applicant

Date of S

Respectfully submitted,

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